

Application No.: 09/904,516
Attorney Docket No.: 012237-0281573

REMARKS

I. Status of the claims

Claims 1-25, 27, 28, and 30-34 are pending. The subject matter of claim 26 has been incorporated into claim 18, and claim 26 has been cancelled. Minor amendments have been made to claims 18, 25, and 27 to place these claims in a preferred format. New claim 34 is directed towards a process of applying the cosmetic composition. Support for this claim may be found on page 14, lines 19-23 of the specification. No new matter has been added.

II. Rejection under 35 U.S.C. § 112, second paragraph

The examiner rejected claims 18-33 under 35 U.S.C. § 112, second paragraph as being indefinite because, according to the examiner, the recitation of L, L', and L" representing a "group derived from diisocyanate" is unclear.

In this response, Applicants have amended claim 18 to incorporate into that claim the limitations recited in claim 26, including the recitations relating to L, L', and L". The phrase "group derived from diisocyanate," which was objected to by the examiner, has been replaced with a clearer and more specific recitation of L, L', and L". As there is no vagueness or indefiniteness surrounding the amended definition of L, L', and L", Applicants respectfully request that this rejection under 35 U.S.C. § 112, second paragraph be withdrawn.

III. Double-patenting rejections

The examiner has rejected claims 18-33 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 44 of U.S. Patent No. 6,602,303. The examiner has also rejected claims 18-33 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 51-68 of U.S. Patent Application No. 10/415,952.

In this response, Applicants provide terminal disclaimers over these references to overcome the double-patenting rejections. Accordingly, Applicants respectfully request that the examiner withdraw the double-patenting rejections.

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IV. Rejection under 35 U.S.C. § 102(b)

The examiner rejected claims 18, 19, 21-25, 27, 28, and 30-33 under 35 U.S.C. § 102(b) as anticipated by U.S. Patent No. 4,617,341 to Laine et al. ("Laine").

As noted above, Applicants have incorporated into claim 18 the limitations of claim 26--a claim that Applicants note was not rejected by the examiner as anticipated by this reference. Thus, after this amendment, all the examined claims now contain the limitations originally recited in claim 26.

Laine teaches cationic oligourethanes having the following formulas:

$R_5-OCONH-Ph(Me)-NHCO-[O-R_2-N^+(R_3)(R_4)R_2-OCONH-Ph(Me)-NHCO]_n-O-R_5$, where R_5 is an aliphatic radical and $n = 1-3$, and

$OCN-Ph(Me)-NHCO-[O-R_2-N^+(R_3)(R_4)R_2-OCONH-Ph(Me)-NHCO]_n-O-R_2-N^+(R_3)(R_4)R_2-OH$, where $n = 2-6$.

In Laine, the quaternary amine group identified by the examiner either appears in the middle of the formula (as in the first formula) or in the middle and on one end of the formula (as in the second formula). However, Laine does not teach a polyurethane having amine groups on each end of the polyurethane chain.

Applicants' claimed invention, on the other hand, recites a polyurethane having amine groups P and/or X at *each end* of the polyurethane chain: $R-X-P_n-(L-Y_m)-L'-P'_p-X'-R'$. As defined by Applicants, X and X' represent a group comprising an amine-functional group which may or may not carry a hydrophobic group or an L" group, and P and P' represent a group comprising an amine-functional group which may or may not carry a hydrophobic group.

As none of the cationic oligourethanes taught in Laine have amine groups on both ends of the polyurethane chain, Laine does not teach the claimed invention. Accordingly, Applicants respectfully request that the examiner withdraw this rejection under 35 U.S.C. § 102(b).

V. Rejection under 35 U.S.C. § 102(e)

The examiner rejected claims 18-28 and 30-33 under 35 U.S.C. § 102(e) as anticipated by U.S. Patent No. 6,277,364 to Bucks et al. ("Bucks").

Bucks discloses a pharmacologically active agent having the following formula:

$$H-[-(YR)_m-OC(O)NH-X-NHC(O)]_n-[-(YR)_m-OC(O)NH-X-NHC(O)O-(RY)_m-[C(O)NH-X-$$

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NHC(O)O-(R Y)_m-]n-H, as set forth in col. 20, lines 2-34.

In the Office Action, the examiner provides a chart that compares the functional groups of Applicants' claimed invention with the supposedly corresponding functional groups disclosed in the Bucks formula. In this chart, Applicants' L, L', and L" correspond with the functional group -OC(O)NH in Bucks.

However, in this response, Applicants have amended L, L', and L" to recite this claim term as comprising the functional group -Z-CO-NH-R₄-NH-CO-Z-. While the newly amended functional group may still correspond with the functional group -OC(O)NH-X-NHC(O)O-, disclosed in the Bucks formula, this definition of L, L', and L" demonstratively changes the make up of the disclosed formula.

In Applicants' claimed invention, only the functional group Y_m appears between L and L' in the formula. The functional group Y, which is defined as representing a hydrophilic group, may or may not be present depending on the value accorded the variable m. Therefore, in Applicants' claimed composition, L will either be adjacent to L' or separated from L' by one or more hydrophilic groups. Such a composition is not disclosed by Bucks.

Rather, in the Bucks formula, the functional group (YR)_m appears between the two functional groups -OC(O)NH-X-NHC(O)O-, thus ostensibly assuming the representation of Applicants' functional group Y_m. However, this same functional group (YR)_m has been designated by the examiner as corresponding to Applicants' functional groups X and X'. The functional group (YR)_m of Bucks would thus have to act as both an amine functional group which may or may not carry a *hydrophobic* group (Applicants' definition of X and X') and a *hydrophilic* group (Applicants' definition of Y). This cannot take place through the definitions of (YR)_m as defined by Bucks.

In the formula disclosed in Bucks, the functional group (YR)_m necessarily appears between the instances of the -OC(O)NH-X-NHC(O)O- functional group, leaving no possibility for the Buck formula to represent Applicants' claimed invention when L and L' are adjacent to one another. Additionally, as set forth above, the functional group (YR)_m of Bucks cannot represent all three of the Y, X, and X' functional groups as defined by Applicants. Accordingly, Bucks does not teach Applicants' claimed invention and Applicants respectfully request that the examiner withdraw this rejection under 35 U.S.C. § 102(e).

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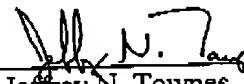
VI. Conclusion

If any issues in this application remain unresolved, the examiner is encouraged to contact the undersigned counsel at the number listed below in order to resolve such issues.

Please charge any fees associated with the submission of this paper to Deposit Account No. 033975. The Director is also authorized to credit any overpayments to the above-referenced Deposit Account.

Respectfully submitted,
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